**JOINT CALIFORNIA PUBLIC UTILITIES COMMISSION AND**

**ENERGY COMMISSION STAFF WORKSHOP ON COST AND BENEFIT METHODS FOR DEPLOYMENT OF DISTRIBUTED GENERATION**

**May 5, 2004**

**California Energy Commission**

**Hearing Room A**

**1:00pm – 5:30pm**

**AGENDA**

1. **Opening Comments – Mark Rawson and Valerie Beck** **1:00 – 1:20**
2. **Panel #1: Existing C/B Analysis and Methodologies** **1:20 – 3:30**

   **Moderator: Scott Tomashefsky**

   **Joe Iannucci, DUA - DER Benefits Analysis Studies Review**
   Presentation on one hundred and twenty-four published DER analysis reports that were screened to determine the "Top 30" recent studies dealing with the valuation and benefits of DER. This report includes 31 in-depth reviews of studies that were considered to be among the best in quantifying the benefits of distributed resources.

   **Chris Marnay, LBNL – Evaluation Framework and Tools for Distributed Energy Resources**
   Presentation on work performed by LBNL for U.S. DOE on qualifying 17 societal effects of shifting to decentralized power system using DG. Each effect is rated as high, medium, or low, on three different scales: the magnitude of the economic benefit; the likelihood that the benefit can be monetized in efficient markets; and how tractable it might be to quantify each benefit analytically.

   **Snuller Price, E3 - A Forecast Of Cost Effectiveness Avoided Costs And Externality Adders**
   Presentation on work performed by Energy and Environmental Economics, Inc. (E3) for the California Public Utilities Commission (CPUC) to forecast avoided costs and externality adders for use in cost-effectiveness evaluations of energy efficiency (EE) and demand-side management (DSM) programs, and its applicability to cost-benefit of DG.

   **TBD, Southern California Edison – Utility Perspective**

   **Kevin Duggan, California Clean DG Coalition – DG Industry Perspective**

   **Public Comments and Q&A on Panel Discussion**

3. **Break** **3:30 – 3:45**
4. **Panel #2: Promising Public Interest R&D Relating to C/B** **3:45 – 5:20**

   **Moderator: Mark Rawson**

   **Snuller Price, E3**
   **Test Bed Demonstration to Measure the Actual Impact of DER on a Utility Distribution System**

Goal of this project is to evaluate the "real world" potential for DER with actual installations. This research will include an investigation of the costs, benefits and cost-effectiveness of DER options to customers, utilities and society, as well as the technical issues uncovered during the process.

**Renewable DG Assessment**

Goals of this project are to identify the best locations for renewable distributed generation (DG) in a local utility distribution company system. This project includes both distribution engineering and economic analysis components and will develop an analysis tool for estimation of costs and benefits of DG, study four detailed example case studies (Palo Alto, San Francisco, Alameda, SMUD), conduct engineering analysis to model the best locations of renewable DG on the distribution system, and explore the indirect benefits of renewables.

**New York DG Pilot Experiences**

Goals of this project are develop utility planning tools and process to incorporate DG into distribution planning. T&D capacity benefits can exist, but require significant utility planning process and evaluation changes.

**Peter Evans, New Power Technologies – Optimal Portfolio Methodology for Assessing Distributed Energy Resource Benefits**

Goals of this project are to demonstrate an analytical methodology that can identify where DER can provide specific T&D network benefits; the value of those network benefits in engineering and economic terms; a suggested set of financial and non-financial incentives to facilitate the development of DER projects, including locational pricing of energy and real and reactive capacity; and, value-sharing, rather than cost-shifting incentives for DER projects that are beneficial to the operation of the T&D network, as well as targeted policy initiatives that will facilitate the recognition and development of beneficial DER projects.

**Ellen Petrill, E2I – Winning Business Structures for Customers, Utilities and Society**

Goal of this project is to develop innovative incentives and approaches to encourage DER, including incentives provided by regulators to utilities to participate in or enable DER integration, and incentives by utilities to customers or developers. These will be documented in a catalog, along with costs and benefits of DER, as a reference manual.

**Public Comments and Q&A on Panel Discussion**

**5. Closing Remarks – Valerie Beck and Mark Rawson** **5:20 – 5:30**

Electronic copies of presentations will be posted by Noon on Tuesday, May 4 and can be found at:
http://www.energy.ca.gov/distgen_oii/documents/index.html

Audio from this workshop will be broadcast over the Internet.
For details, please go to: www.energy.ca.gov/realaudio/

A court reporter will be preparing a transcript of this workshop. A copy of the transcript will be posted on the CEC website following the workshop. For details, please go to:
http://www.energy.ca.gov/distgen_oii/documents/index.html